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Connecting Communities:
Gallatin County Trails Report & Plan

Prepared for the
Gallatin County Planning Board

By the
Trails Advisory Committee

March 2001

Draft

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CHAPTER 1. Executive Summary

The Gallatin County Trails Advisory Committee was formed as an advisory committee to the Gallatin County Planning Board, and assigned to develop a countywide trails plan. The Committee inventoried all existing trails including Forest Service trails. Information about existing trails was compiled into a computer database. Baseline maps were created to aid future planning. From August of 1999 through the next year and a half, committee members met with city councils, school districts, non-profits, county boards, and other public interests to gather ideas and information. Members of the public completed surveys and mapped potential trail corridors during Open Houses held around the county.

The Connecting Communities Plan should serve as both a resource guide and a trails network vision. Planning Boards, Subdivision Review Boards, developers, school districts, and others can use the trail development siting guidelines and the extensive supporting appendices in all trail projects.

Combining the trail planning experience of the committee with public input, the trails network vision was created. The highest priorities were for recreational trails and for safe transport to connect towns and community amenities. Countywide, the highest priority trail is one linking Belgrade and Bozeman. Other high priority trail corridors are: Valley Center, Bozeman-“M”, Springhill-Bozeman, Four Corners-Bozeman, Four Corners-Gallatin Gateway, and Three Forks-Trident. A general principal that should guide future trail development is the linking of residential neighborhoods with schools, parks, shopping and longer distance commuter trails.

The Connecting Communities Plan is only the first step toward the fulfillment of a countywide trail network. The Trails Committee urges the County Commission to adopt this plan into the County Growth Policy. It can then form the legal foundation for review of all new development proposals that may affect trails or open space.

It is recommended that a Parks and Trails Board be appointed to take the lead in implementing the Connecting Communities Plan. Although much can be accomplished by volunteers more is needed. The County Planning Department should create a position for a professional parks and trail coordinator. It is recommended that the county explore the possibility of forming a County Parks and Trails District to support such a position.

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CHAPTER 2. List of Committee Members

The Gallatin County Trails Advisory Committee is comprised of ten members appointed by the Gallatin County Planning Board:

- **Richard Charlesworth**, Bozeman – serves on the Gallatin Valley Land Trust trails committee; designer of the Wilson Wetlands Trail for the Jackson Hole Land Trust; practicing architect.
- **Michele Corriel**, Belgrade, committee Secretary – member of the Belgrade Planning Board for five years; journalist for the *High Country Independent Press* covering local government/planning issues.
- **Cyndi Crayton**, Bozeman – member of Bozeman Watershed Council; VP and Recreation/Trails committee member; former member of Bozeman Recreation and Parks Board and its Trails Committee; GPS/GIS mapping expert.
- **Greg Johnson**, Manhattan - B.S. in Landscape design from MSU. Worked with his own company, Montana Ponds and Streams, for the past eleven years designing and building trails and landscapes throughout Montana.
- **Bill Olson**, Big Sky - member Board of Directors, Big Sky Owners Association; chairman, B.S.O.A. - Parks, Open Space and Trails Committee.
- **Gretchen Rupp**, Bozeman, committee Chairperson - former member: State Trails Advisory Committee, Bozeman POST Committee, Bozeman Parks and Recreation Board Trails Committee.
- **Sandra Smiley**, Bozeman - Bozeman City Commissioner; former member of City-County Planning Board; former member of City Planning Board.
- **Laurita Vellinga**, Bozeman – member of Parks Open Spaces Trails Committee 1991-1993; member of Bozeman Recreation and Parks Advisory Board since 1993 (chairman of trails committee; member of subdivision review committee).
- **Gary Vodehnal**, Bozeman - Resource Specialist with the Gallatin Valley Land Trust - primary responsibilities are with Conservation Easement stewardship and the management of GVLT's trail program. Works with local municipalities and concerned citizens to plan, build, and maintain public trails, primarily in the Bozeman area.
- **Michael Welch**, Bozeman – Department of Defense proposal and documentation author; computer database and word processing expert.

Also serving briefly on the committee were Cecelia Reiner of Bozeman, Carol Collins of Big Sky, and Gene Townsend and Sylvia Vanderwall of Three Forks.

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CHAPTER 3. Acknowledgments

Several people who did not serve as members of the Trails Advisory Committee were vital to its success in inventorying existing trails and developing the proposal for a county-wide trail system. Kris Thomas volunteered as a writer, publicist and editor. Terry Johnson assembled data on all the National Forest trails within the county, and synthesized the information into a form compatible with the committee's trails database. Jody Olsen and Jon Henderson from the City of Bozeman Planning Department and Allen Armstrong and Chad Murray from the Gallatin County GIS Department made the maps for the report and proposal. Jan Lerum, Bozeman District Ranger, and Jonathan Kempff, Forest Engineer, worked with the committee to assure that Gallatin Forest trails information was incorporated in the process. During Summer 2000, a number of community volunteers used Global Positioning System equipment to create digital data for all of the non-Forest trails in the county. In different capacities, Debbie Fleming and Ron Davis of West Yellowstone, Belgrade City Planner Jason Karp, Anne Banks of the Bozeman Recreation & Parks Board, and the Gallatin Gateway Willing Workers Ladies Aide assisted the committee. Finally, the committee was assisted throughout its deliberations by Gallatin County Planning Department staff, particularly Lanette Windemaker, Planner. The Trails Committee is grateful to all of these people for their patience, good humor and good work.

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CHAPTER 4. Introduction

This document fulfills the requirements that the Trails Advisory Committee submit a report of its efforts and a plan for adoption by the Gallatin County Planning Board.

Why A Trails Plan?

Trails serve many functions and can vastly improve the quality of life in our communities. Public trails are utilized by residents and visitors of all ages, physical abilities, and economic standing. Trails are used by people seeking alternative transportation to relieve the increasing congestion of automobile traffic resulting from rapid urban sprawl and population growth. Trails and greenways can improve recreational opportunities and provide a healthful way to exercise for walkers, runners, bikers, and cross-country skiers. Trails can improve economic viability by increasing adjacent property values or by stimulating new businesses that service the needs of trail users. Other trails are developed primarily to protect natural resources and provide greenways for stream buffers and corridors for wildlife movement. These trails through natural areas allow residents a chance to enjoy nature close to the urban areas and can be used as natural classrooms for school children. Most importantly, building trails allows different groups to work together toward a shared goal of creating a livable community. Those trail building partnerships foster trust in each other and establish a sense of place and community.

The Gallatin County Trails Advisory Committee was formed as an advisory committee to the Gallatin County Planning Board. Volunteers with skills ranging from trail building to computer mapping were appointed to the committee. These volunteers were from Bozeman, Belgrade, Manhattan, Three Forks, and Big Sky, and met from August 1999 through March 2001.

The committee's main task was to develop a plan for a countywide trail system. Trails have been largely ignored as a viable method of alternative transportation. The Planning Board knew trails would become more and more important to the County's growth and wanted a plan that would be legally binding - the sooner the better. This advisory effort took place in conjunction with a major revision of the county's Growth Policy. As part of the policy, the trails plan would form the legal grounding for trails-related subdivision review and would help decision-makers set priorities for expenditure of transportation grant funds, in addition to other official activities.

Tasks of the Trails Advisory Committee

The specific charge to the Trails Committee was presented in a letter from the Gallatin County Planning Board dated August 11, 1999:

1. Identify and inventory all existing trails and trail rights of way in Gallatin County, including current trail ownership/management authority and status;
2. Identify any existing plans for trail development proposed by local governments or others in Gallatin County;
3. Establish criteria for location of new trails;

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4. Develop a proposal for a County-wide trail system that identifies potential trail corridors and endpoints;
5. Develop a prioritization system and rank proposed trail segments in order of significance/importance;
6. Estimate costs, infrastructure, and any legal changes needed to support a County-wide trail system or a portion of such system;
7. Document all findings and work with the planning staff to incorporate any findings into the County electronic or other databases;
8. Provide the Board with a final report detailing the committee's findings and recommendations.

The planning emphasis was to connect the communities of Gallatin County. Another major goal was to tie together schools, parks, community amenities, well-used trails and popular hiking spots. The committee focused mainly on non-motorized trails as directed by the Gallatin County Planning Board. Although some of the existing trails in the county do support motorized recreational vehicles, the emphasis of the countywide trail plan was to give people an alternative to motorized transportation.

Organizations Working Together

Since trail development in Gallatin County occurs on a continuing basis, the Trails Committee incorporated the recommendations of other groups in the process. As the Connecting Communities Plan took form, these groups also considered the plan in their work. A short list of these organizations includes:

- The Gallatin Valley Land Trust, which helps plan and develop the *Main Street to the Mountains* trail system in and around Bozeman.
- The Bozeman Area Bicycle Advisory Board, which works to provide more opportunities for safe bicycling in Bozeman.
- The Bozeman Recreation and Parks Advisory Board, which oversees trail development in the city and was responsible in 1990 for the development of Bozeman's Parks, Open space and Trails Plan (the POST Plan).
- The Gallatin County Planning and Bozeman Planning Departments, which review subdivision proposals for potential open space and public trails.

The work of the Trails Committee took place concurrently with several major planning efforts in the county. The Bozeman-Area Transportation Plan was revised in 2000, under the oversight of the Transportation Coordinating Committee. The Trails Committee's recommendations were incorporated into that plan. Bozeman's Master Plan, the 2020 Plan, was revised and also takes into account the committee's findings/recommendations. Gallatin County's Open Space Board was successful in passing an open space bond issue in November 2000. Acquisition of easements for trail development was specifically noted as an activity eligible for funding from the bonds.

Use of the Plan

Trail developers can use the Connecting Communities Plan to guide their projects.

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Subdivision reviews can assure that planned trails will have maximum utility – they will not be isolated and unknown. The Connecting Communities Plan will make the County “grant ready” and should make it easier overall to apply for trail grants. It will encourage the development of a coherent big picture rather than a collection of fragmented subdivision trails leading nowhere.

The Gallatin Valley is being developed rapidly. Now is the time for a countywide trail plan so that opportunities for non-motorized transportation/recreation will not be lost.

A very successful trail project in Gallatin County has been the *Main Street to Mountains* campaign fostered by the Gallatin Valley Land Trust. Once considered far-reaching and optimistic, it is now a reality and the pride of the Bozeman community. Adoption of the Connecting Communities Plan will ensure more successful projects of this caliber.

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CHAPTER 5. Committee Activities

The tasks assigned the Trails Advisory Committee by the Planning Board fell into three categories:

- Inventory existing trails in the county, including planned and proposed trails. From these findings construct an original base map and database.
- Work together with county officials, groups active in trails-related activities, and the people of Gallatin County throughout the process.
- Develop a countywide trail proposal that includes criteria for siting and designing trails, and identifies high-priority trail corridors.

These tasks included fieldwork such as mapping existing trails, public affairs work, research and data entry, data analysis, and writing. Specific activities are described below.

Project Initiation

The first step was to introduce the Trails Committee to the county. To chart its overall course, the Trails Committee developed a detailed timeline for its work (see Appendix A). An informational handout (Appendix B) explaining the Trails Committee's existence and purpose was distributed to the USFS, NPS, MT FWP, MT Conservation Corps, planning boards, departments of recreation, departments of transportation, guest ranches, non-profit groups, *etc.* Trails Committee members spoke to all the city councils in the county, and the following school districts: Belgrade, Amsterdam, Gateway, Monforton, and Anderson. This ensured the inclusion of any trail plans these entities may have had, and helped the committee get feedback on how people felt about a countywide trail transportation system. The great majority of decision-makers contacted in this way were enthusiastic about the prospects of such a trail network.

Inventory of Existing and Planned Trails

The first major task undertaken was to inventory all the existing trails, including Forest Service trails, and identify existing trail plans. The estimated large number of identifiable trails within the county dictated the need for a computerized repository for the inventory. A list of data attributes was developed to describe the information to be collected for each trail placed in the inventory. Once the list of attributes was agreed upon, data types and sizes were determined and the design of the Trails Inventory Database was completed.

The Trails Inventory Database is implemented as a Paradox relational database with a Delphi graphical user's interface. The trail information stored within the database is not directly accessible; it must be accessed via the programmed user's interface. The programmed user's interface provides the capability to add and modify individual trail records and to print all or part of the records in the database. During development, the database and its support interface resided on a Personal Computer belonging to one of the Trails Committee members.

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Trail Attributes

Each record of the database contains identical fields of information for a specific trail. The following list provides the identity of and details for these data fields:

- Trail tag (a unique numeric identifier which will identify the trail on the county map)
- Trail name
- Trail number (if an assigned number currently exists)
- General location [Amsterdam, Bangtail Range, Belgrade, Big Sky, Bozeman, Bozeman-North, Bozeman-Northeast, Bozeman-East, Bozeman-South, Bozeman-West, Bridger Range, Four Corners, Gallatin Gateway, Gallatin Range, Henrys Range, Logan, Madison Range, Manhattan, Three Forks, West Yellowstone, *etc.*]
- Base map (where the committee got its original information)
- Trail head location (township, range, section)
- Trail head access road
- Trail ownership
- Trail maintenance responsibility
- Trail usage {hiker, horse, bicycle, motorcycle, ATV, snowmobile, cross country ski, 4 wheel drive, runner}
- Trail status [existing, under construction, planned, proposed, multi-state]
- Trail tread [sidewalk, paved, double shot, timber, gravel, natural fines, native material, mixed]
- Special usage {handicapped, fishing access, bird watching, rock climbing, fitness, no dogs, leashed dogs, commuter route, school link}
- Trail length (in meters)
- Trail access [public, private]
- Easement [none, public access, permission required]
- Easement fee
- Mapped [no, yes] (presence on county GIS map)
- Matrix identifier (where is the trail on the county map)
- Priority level (assigned by the committee)
- Notes

Information contained in parentheses ‘()’ is explanatory. Lists contained in brackets ‘[]’ are single choice; lists contained in braces ‘{ }’ are multiple choice.

Once the Trails Inventory Database was created, gathering of information for trails identified within the county was performed. To assist this effort, and to regularize the gathered information, a Trails Data Entry form was designed. Appendix C illustrates this form. The first pass at information gathering utilized the local knowledge of the members of the Trails Committee. Approximately 40 identified trails were divided among the committee members and Trails Data Entry sheets were completed for each identified trail. These 40 trails were primarily public trails located in or adjacent to the communities in Gallatin County.

Entering Trail Data

In parallel with the initial effort, the US Forest Service volunteered to summarize the same information for the trails located in that portion of the Gallatin National Forest that is in

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Gallatin County. Terry Johnson (a volunteer) worked with the Forest Service to prepare a spreadsheet of information and submitted it electronically to the committee. The data from the spreadsheet was augmented as necessary (trail head access road, trail length converted to meters, *etc.*) and entered into the database. After all identified trails had been entered into the database a complete printed report of the information was generated.

Database Linked to GIS

The trails inventory is available on the County's Geographic Information System (GIS) and is hyper-linked to a database which contains the information about each trail. The majority of the trails are in the Gallatin National Forest and Yellowstone National Park. New trails since completed have also been added to the database.

Construction of Original Base Maps

To complete the task of inventorying existing trails, the Trails Committee constructed baseline trail maps for use in future planning and funding awards. Maps and information on trails were collected from a variety of sources, including the Forest Service, the Montana Department of Fish, Wildlife and Parks, the Bureau of Land Management, planning boards, and grant applications. Since this data existed in a wide variety of formats, it was necessary to establish a uniform data set for the inventory process.

A draft map of existing, planned, proposed trails and potential trail corridors was hand drawn utilizing both public comment and Trails Committee input. Sketches of potential future trail corridors were generated using the criteria established in Chapter 8.

The Base Map

In order to provide a base map that is accurate, informative, and compatible with the County's current GIS, existing and planned trails were mapped using Global Positioning System (GPS) technology (hand-held Trimble GeoExplorer II GPS units). Appendix D lists the data parameters that were collected during mapping. Volunteers were recruited, trained, and provided with coordinated mapping tasks. Upon completion of each mapping assignment, the transfer of data from GPS units to the GIS software was made. All GPS data were differentially corrected to provide for the highest degree of mapping accuracy available. All trail lines and feature points have two to five meter accuracy.

The City of Bozeman planning staff agreed to utilize their computerized mapping capability to generate trail maps for the Trails Committee. After all the trails were recorded by GPS, compilation of data for submission to the City of Bozeman was performed using ArcView GIS software. Collaboration with City and County GIS staff ensured that all data were compatible.

All trail information was compiled for editing and accuracy checks. The Committee went through three iterations of map examination and correction with the City Planning staff. The Bozeman Recreation and Parks Board and the Gallatin Valley Land Trust also participated in

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finalizing the trail maps. The current map for Gallatin County and detailed maps of each community area are presented in Chapter 7.

Working Together

The Trails Committee met periodically with county officials, non-profits, the people of the county, and other agencies involved with trails.

Public Participation

One of the tasks was to conduct public outreach to learn what residents desired in a trail system. After the trail inventory was complete, four open houses were conducted to accumulate as much information from the public as possible. The open houses were promoted through newspapers and fliers (Appendix E). They were held in Bozeman, Gallatin Gateway, Belgrade and Three Forks in the spring of 2000 and were moderately well attended: a total of 80 people signed in.

At these meetings, people could be creative about their ideas for connecting communities. Large scale maps of the various areas of the county were available with overlays. People were invited to draw their “dream” trail corridors on the map overlays. This information was incorporated in the final draft of the Future Trail Corridors map (see Map1).

The entire printed report of the trail inventory was also available at these meetings for public review. Those in attendance helped to update and correct some of this inventory. Several additional trails (both existing and proposed) were identified. Trails Data Entry forms were completed by local community members and added to the database.

Seventy-five surveys (Appendix F) were completed during and after the open houses. These were collated and the information integrated with the marked-up maps to form the basis of the trails plan. After studying the surveys, the committee felt it had a good perspective on the trail development priorities of the people of Gallatin County (see Appendix G).

Involvement with Public Officials

The Trails Committee kept the Gallatin County Planning Board apprised of all its activities. Steve Forrest, Board Chairman, received all committee correspondence and attended several committee meetings. Some committee members also met with other county planners to come up with administrative recommendations for implementing a trails plan. Assistance was also provided by representatives of the Bozeman Recreation and Parks Advisory Board who routinely review subdivisions for trails and parks.

The Trails Committee met with personnel from the Montana Department of Transportation to determine the schedule for road improvements affecting future trail corridors. Committee members also met with various other agencies involved with trails such as the Bicycle Advisory Board and Bozeman’s Planning Department’s transportation committee. This helped the Committee to prioritize its goals.

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Development of the Trails Plan

The next major activity was putting the trails plan together. The trails plan was to serve as both a resource guide and a trails network vision. More than a year's worth of research and idea-gathering needed to be incorporated.

Public Input

The Committee's goal was to create a useful resource guide that would help nurture trail development in Gallatin County. The priorities identified in the open house surveys were instrumental in guiding preparation of the Connecting Communities Plan. The surveys asked the respondents to rank purposes and priorities for new trails. A summary of the survey priorities and their roles in the planning process is given here. (See Appendices G and H for more detailed results of the Open House Surveys.)

1. The survey results indicated recreation was the top priority for new trail development in the county, followed by transportation, education, and economic development.
 - Transportation to recreational areas such as trailheads, parks and fishing access sites was considered when identifying trail corridors.
 - The use of transportation as recreation (people using their non-motorized commute to work, school, or shopping as a form of recreation) was considered when developing the Connecting Communities Plan.
2. Although the public valued recreation over transportation for new trails in the Gallatin Valley, long-distance transportation corridors were repeatedly named as high priorities. In ranking trail priorities, the trail corridor consistently identified as highest-priority was a commuter route linking Belgrade and Bozeman. The next-highest priorities were other long-distance routes, such as one from Bozeman through Four Corners to the mouth of the Gallatin Canyon, and a route west from Belgrade.
3. The highest-priority use to be served was identified as walking/running. Bicycling was a strong second choice, followed by cross-country skiing.
 - Most of the trail uses are compatible and could be served by the same trails and trail corridors.
4. The surveys identified safety enhancement as the most important function that can be served by the development of new trails. Preserving of natural features and connecting community amenities share second priority. Providing access for handicapped users and connecting community trails to forest trailheads were also noted. Economic development was rated the lowest priority.
 - Experience in other communities around the country has shown that trails increase safety, not only by creating safe passage for young and old travelers alike, but also by reducing crime along trail corridors.

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- Protection of water quality, preservation and non-fragmentation of habitat, and enhancement/maintenance of riparian buffers were all taken into account when devising the Connecting Communities Plan.
 - Though economic development rated low, when trails are included as part of a development, property values tend to rise and economic development will follow.
5. No funding mechanism was identified as a clear favorite by completing surveys. The issuance of county bonds, procurement of grants, and subdivision parkland dedication were all rated more or less equally. Reliance on private funding was clearly the last choice. See Chapter 9 and Appendix M for possible funding sources.
 6. Open house attendees were asked to list concerns regarding development of new trails in the county. The concerns expressed covered many subjects, but the overwhelming majority of respondents voiced a sense of urgency regarding the trail network: fear that land development is happening so rapidly that opportunities are being lost forever, plus concern that trail development will be forced to take place piecemeal so that trail segments do not connect. The need for an integrated, connected set of public trails was mentioned repeatedly.
 7. Locations for desired trail corridors were marked on a series of maps by Open House attendees. This geographic information was correlated with the priority data from the surveys.
 - The trail corridor recommendations in the Connecting Communities Plan are based on this input.

The Connecting Communities Plan is comprised of Chapters 7, 8, 9 and 10 of this report. The Trails Committee recommends that the Connecting Communities Plan be adopted to guide future development of a trail network in Gallatin County.

Field Visits

To better define the high-priority routes that were identified by the public, the committee made field trips around the county during the summer of 2000 to look at possible trail corridors. Later when the most important/feasible of these routes had been identified, committee members with experience in trail construction more carefully assessed the possible corridors for engineering feasibility and cost.

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CHAPTER 6. Findings: Existing and Planned Trails

The inventory of existing and planned trails in Gallatin County shows that the County already has a large number of trails. The mapping of the Trails Inventory Database illustrates that most of the non-Forest Service trails do not interconnect to form a useful network of trails.

For the purposes of this report, the term “trail” refers to a public way, not part of a highway or road, that is designated for non-motorized pedestrian and bicycle travel. It may be shared in some cases by equestrians, runners, roller-bladers, skiers, *etc.* The width and surface materials for a path or trail vary depending on the type and volume of use. The spectrum of trail types ranges from unpaved single tracks to 8-plus foot wide, paved stand-alone trails. Some National Forest trails cataloged in the Trails Inventory Database do allow motorized travel.

Trail planning and development within Gallatin County is an on-going process. Four examples illustrate very different approaches to providing new trails:

1. *Main Street to the Mountains* is a system of public trails designed to connect the heart of Bozeman with the Bridger and Gallatin mountain ranges. It is comprised of various trails built over the last 20 years. The current goal is to build an interconnected system of community trails and complete the trail segments that reach public land in the mountains. The Gallatin Valley Land Trust is the primary organization working on development of this trail network.
2. In 1999-2000, ten Monforton School seventh-graders spearheaded a school civics project that resulted in the building of a safe path to their school from Huffine Lane. The students designed the path, raised \$45,000 for its construction and convinced the Gallatin County Commission to provide materials, equipment and labor. On top of a successful trail completion, the group won a national award from the Center for Civic Education for the best project in the United States.
3. The community of Three Forks has been actively developing a trail system around several ponds on the edge of town. The non-motorized pedestrian trails are a valuable amenity for the community and provide access to the ponds and parklands for swimming, fishing, bird watching, picnicking, *etc.* Plans are now being formulated to connect the trail system with the Headwaters State Park, 3.7 miles to the north.
4. The Great Western Trail has been proposed as a connected corridor linking together existing roads and existing trails. The corridor extends from the Arizona-Mexico border north to the Idaho-Montana border; it is proposed to continue north to the Canadian border. One of the northern proposed routes would pass the length of Gallatin County from West Yellowstone to the Missouri River. The principal use to be supported by the trail would be motorized recreation.

The Connecting Communities Plan is concerned with projects like the first three above. Motorized recreation is not within the scope of this plan.

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Trails Inventory

The Trails Inventory Database currently contains information for 205 trails. As of January 2001, the status of the inventoried trails falls into five categories:

- | | |
|--|------------|
| • Existing | 193 trails |
| • Under construction | 1 trail |
| • Planned | 1 trail |
| • Proposed | 3 trails |
| • Multi-state (2 or more of the above) | 7 trails |

Planned trails have a designated route and funding associated with them; proposed trails have a general route concept (no funding); and, multi-state trails are those where portions of the overall trail fall into different status categories. The inventoried trails that don't yet exist are:

- | | |
|---|------------------|
| • Under construction – | |
| - College “M” Cut Across – USFS | Bridger Range |
| • Planned – | |
| - Grayling Arm – USFS | Henry's Range |
| • Proposed – | |
| - Painted Hills Gap | Bozeman-South |
| - West Yellowstone Pathway | West Yellowstone |
| - “Gateway Trail & Tunnel” | Gallatin Gateway |
| • Multi-state – | |
| - East Gallatin Recreational Area Trail | Bozeman-North |
| - “Entryway Trails” | Bozeman-North |
| - “Meadows Trails” | Bozeman-North |
| - Bridger Creek Golf Course | Bozeman-North |
| - Headwaters Trail | Three Forks |
| - River Rock Trail | Belgrade |
| - “Wildhorse Properties Trail” | Belgrade |

Of the 205 trails, 166 are National Forest trails located in the Gallatin National Forest with a combined length of 863.5 miles. Four Yellowstone National Park trails have a combined length of 19.2 miles within Gallatin County. The remaining 35 trails are located throughout Gallatin County and have a combined length of 94.5 miles. All together, the trails cataloged in the database have a total length of 977.2 miles.

Database Printed Reports

The printed reports provided by the database user's interface present a block description of the information in each selected data record. The following two examples provide an illustration of the information provided for a community trail (1) and a Forest Service trail (45):

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1 Name: Gallagator Linear Number: Location: Bozeman
Trail Head: Township - 2S Range - 6E Section - 7
Access Road: Church Street
Ownership: City of Bozeman Responsibility: City, GVL, Adopt-a-Trail
Trail Usage: Hiker, Bicycle, Cross country ski, Runner
Trail Status: Existing Trail Tread: Gravel Length: ~3220m
Special Usage: Handicapped, Leashed dogs, Commuter route, School link
Access: Public Easement: Easement Fee:
Mapped? Yes Map Matrix: Priority:
Notes: Connector to Bogert & Burke parks

45 Name: Sage Creek Number: 11 Location: Madison Range
Trail Head: Township - 9S Range - 4E Section - 23
Access Road: US 191
Ownership: USFS Responsibility: USFS
Trail Usage: Hiker, Horse, Bicycle, Snowmobile
Trail Status: Existing Trail Tread: Native Material Length: ~22850m
Special Usage:
Access: Public Easement: Public access Easement Fee:
Mapped? Yes Map Matrix: Priority:
Notes: Last 3 miles of trail are wild & are always closed to motorized vehicles

Appendix I provides the complete printed output of the current contents of the Trails Inventory Database. In the future, the user's interface will be modified to provide some or all of this information in electronic format to another (county) computer.

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CHAPTER 7. Proposal for County-Wide Trail System

Introduction

The Connecting Communities Plan described in this chapter is based on:

- The charge given to the Trails Advisory Committee by the Planning Board (see Chapter 4).
- Public input on trail priorities, gathered throughout the planning process (see Chapter 5).
- Committee member experience planning trails in Gallatin County and elsewhere (see Chapter 2).
- Priorities for siting general trail routes and specific corridors, established by the committee, taking into account the wishes of the public derived from input sheets and surveys (see Chapter 8).

These priorities and trail siting criteria are discussed at length in the following chapter. They are based on the need to connect residential areas with community amenities. The proposed trails are concentrated in and around the communities of Gallatin County. Connections with schools are a high priority. Parks, National Forest trailheads and some commercial districts are also included. Both recreation and transportation are served by these proposed trails. Most would enhance the safety of non-motorized travel through communities. Many are sited to connect with existing trails. Long-distance routes crossing the county's borders that may not be realized for many years are also included.

General Trail Mapping

Map 1 shows the trail proposal for all of Gallatin County. The proposed trails in the vicinity of Bozeman are shown on Map 2. Definitions of the trail types that appear on all map legends are as follows:

- *Existing trails* are any pathways so defined by the administering agency. They may be simply marked routes through the backcountry, or they may be paved corridors. On National Forest lands, many existing trails are open to motorized use (although few would accommodate automobiles).
- *Boulevard trails* are paved pathways parallel to but separated from roads, designed for foot and bicycle travel but accommodating other non-motorized uses as well.
- *Future trail corridors* are broad-brush indications of possible trail locations within a corridor of alternative site locations. Actual location of the proposed trail is dependent upon right-of-way negotiations.
- *Bike routes* are transportation pathways, which may be on the edge of roadways or separated from automobile traffic. Bike routes may share travel lanes with other non-motorized trail uses.

The lines on the maps denoting future trail routes are very broad, because the proposed routes in most cases are very general. The corridors emphasize the connection of two particular locations via a non-motorized pathway. They are not indicated as occupying a specific

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corridor or traversing particular parcels of land. This is because establishing the specific corridor to be used by a trail is a very lengthy process, involving the trail developer, the landowners and often the permitting agencies. In addition, there are usually multiple possible corridors to connect two points. It is not appropriate to foreclose on any of these possibilities at this early point in development of the trail system for Gallatin County.

The exceptions to this very general route concept occur where it is desirable to develop a trail along a specific road that already traverses a developed area. In this case the trail location is strongly constrained, if public right-of-way is to be used. The principal example of this is the proposed trail between Belgrade and Bozeman. Whether it follows the Frontage Road or I-90, its location can be fairly well established.

Highest-Priority Trails

The trail linking Belgrade and Bozeman is the highest-priority proposed trail in Gallatin County. This was pointed out in Bozeman's POST Plan more than 10 years ago. Its importance was again asserted by attendees of the four open houses conducted by the Trails Committee in spring 2000. Such a trail would serve as a bicycle commuter route between the two largest communities of Gallatin County. The Trails Advisory Committee recommends that the public officials who fund trails through TEA-21 grants on behalf of Belgrade, Bozeman and Gallatin County coordinate their efforts, pool their funds, and develop a Belgrade-Bozeman bicycle trail before they fund any other trails using these grants.

Belgrade - Bozeman Corridor

There are three alternative corridors for a Belgrade - Bozeman route as illustrated by Map 3. A trail occupying any of these corridors should be built to Class I standards (see Appendix L).

1. North of I-90 on the interstate right of way,
2. A boulevard trail along the frontage road north of I-90,
3. South of I-90 from Jackrabbit Lane along Alaska then on the southern edge of the interstate right-of-way.

The *North 19th Avenue/Oak Street Corridor Master Plan for the City of Bozeman*, February 3, 1997, defines trail corridors along the North 19th Avenue corridor. The eastern terminus of a Belgrade-Bozeman trail would connect with these planned/existing trails.

The alternative 1 and possibly the alternative 2 route would cross under the interstate at the underpass approximately 1.5 miles west of North 19th. All three routes would then proceed eastward on the southern edge of Valley Center Road to North 19th. This trail would connect to the existing trail system by crossing North 19th at the traffic light into the Rest Area then onto the existing trail. The alternative 2 route could proceed to the intersection of Springhill Road and the frontage road to provide future access to a possible route along Springhill Road.

The alternative 1 or alternative 2 routes appear to be optimal because the trail entrance into Belgrade would provide access without extensive interaction with the high-traffic area

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around the Belgrade - Interstate-90 interchange. The alternative 1 trail would use the northern edge of the interstate right-of-way to the underpass to Valley Center Road. This trail would require one bridge and about 1.5 miles of safety fencing along the two gravel pits that are on the eastern edge of Belgrade. The estimated cost of this trail would be about \$1.4 million. TEA-21 Funding would provide 86.58% of this amount leaving about \$188,000 necessary for the local matching funds requirement. This trail would have a 10-foot-wide hard surface with 2-foot shoulders per American Association of State Highway and Transportation Officials (AASHTO) minimum guidelines. The trail would also be constructed to meet the accessibility requirements of the Americans with Disabilities Act (ADA).

Alternative trail 2, a boulevard trail along the frontage road, has a small window of opportunity for inclusion in the planned rebuilding of the frontage road between Bozeman and Belgrade. The overpass designs for both of the overpasses at 7th Ave. and N. 19th Ave. need to be reviewed for accommodation of a safe route using these overpasses. The boulevard trail could connect to these routes if safety were deemed adequate; otherwise the route could be as described above.

Valley Center Corridor

The development of a bicycle transportation route along Valley Center Road is the second highest trail priority. This road transects the most-rapidly-developing part of the Gallatin Valley. It is already a major auto commuter route, and will be an even more important corridor in coming years. The road is slated to be rebuilt by the Montana Department of Transportation in 2004 or 2005, and that project should include a boulevard trail for bicycles all the way from Jackrabbit Lane to North 19th Avenue (Map 4). This trail would allow safe commuting from residential neighborhoods bordering Valley Center to the North 19th commercial area, and possibly to the regional park (as this is written, locations under consideration include two that are in the vicinity of Valley Center and North 19th). In a meeting held with the Montana Department of Transportation in the autumn of 2000, MDT personnel confirmed that Valley Center Road is to be rebuilt in the next five years and will include (at the very least), designated bike lanes along its edges and boulevard trails where possible.

Bozeman – “M” Corridor

The Montana State University "M" is a very popular recreational area and the construction of a trail connecting Bozeman to this area is considered a high priority by the Trails Committee. The "M" trailhead is becoming an increasingly popular destination, often creating an overflow of parked vehicles that line Bridger Canyon Road. Many people have expressed the wish for a safe bicycle, pedestrian route to the trailhead, saying they would no longer drive if this alternative were available.

The trailhead parking situation is complicated by a dangerous entrance location off the Bridger Canyon Road and a vehicle capacity for the lot that does not meet the increasing demand of "M" trail users. The U.S. Forest Service, the Federal Fish and Wildlife Service,

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and the State Highway Department all have a stake in helping to plan and build a safe and functional trail-head parking area for the "M".

Bozeman's *Main Street to the Mountains* trail system reaches the intersection of Bridger Drive and the Story Mill Road. Completing this critical link to the "M" will tie the National Forest trails in the Bridger Mountains with the City of Bozeman, and the East Gallatin Recreation Area. This trail connection could follow several different corridors that will provide distinctly different experiences for the user and would present three distinctly different challenges to implement (see Map 5). The cost for alternatives one and three would be lower than the costs for alternative 2 because they would be constructed to the Class II, natural fines specifications included in this report. Alternative 2, a paved 10-foot boulevard trail along Bridger Drive, would be the most expensive option due to terrain considerations and the higher standard of construction. All three trails would provide recreational and transportation benefits for the users. Alternative 2, the paved trail along Bridger Drive would be the most direct route and be the most accessible for handicapped users. Construction of more than one of these trail options could create several large loops for the trail user's enjoyment.

The three different routes are described below in no order of preference:

Alternative 1

The northern most route could be difficult in terms of the number of trail right-of-way easements required to cross private land. Several trail corridor options to be considered would be generally described as beginning along the Story Mill Road, north of the intersection with Bridger Drive and running to the northeast, eventually connecting with the foothills trail on Forest Service Land between the "M" and the "B". The City of Bozeman has ownership of several parcels of land in the Lyman Creek Drainage that could prove to be important route possibilities for this trail corridor alternative.

Alternative 2

The middle route would proceed along the southern side of Bridger Canyon Road in the highway right-of-way as a boulevard trail. The 8- to 10-foot wide, paved trail could cross Bridger Canyon Road in the vicinity of the fish hatchery via a tunnel to the parking lot at the "M" trailhead. This tunnel could provide the additional benefit of providing safe passage for pedestrian, bicycle, and wildlife traffic between the "M" trail and the fish hatchery nature trail and could eventually connect other trails that might be constructed through the Story Hills south of the hatchery. The highway bridge over Bridger Creek is scheduled for replacement in the next few years and pedestrian walkways could be added to help facilitate this trail option. Steep embankments along the roadway will complicate this trail construction project. It may be necessary to negotiate with private landowners for additional right-of-way, or to place the trail along the edge of the roadway with a rumble strip to help separate pedestrians and automobiles.

Alternative 3

The southern route could prove difficult to construct because of steep hilly terrain and the number of right-of-way easements that would be necessary in order to cross private land.

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This would be a very scenic trail route due to the elevation gained as it traverses the Story Hills. The trail could tie into Bozeman's existing trail system near the historic Story Mill, follow the Story Hills to the east, and eventually drop down to the fish hatchery and Bridger Canyon Road. A tunnel or well-marked highway crossing would be necessary to provide safe passage for pedestrians and bicyclists. The tunnel as described earlier, could be included in plans to improve and expand the "M" parking lot.

Five other potential trail corridors were identified by the committee as having a high priority, but the committee did not rank them in order of importance. Two would serve principally as recreational trails, the others for transportation.

Springhill – Bozeman Corridor

A safe bicycle commuter route from Springhill into Bozeman is a very high trail priority. A great number of people make this commute daily, and many have voiced the desire to make it on a bicycle when the weather allows. This route should go from the Springhill Community Road to the terminus of North 19th Avenue (Map 6). Because the land is in numerous privately-owned parcels, the most feasible route is a boulevard trail within the Springhill Road right-of-way (in the ditch). This type of project would be most feasible if TEA-21 funds were used, and the trail were built in conjunction with a road rebuilding project.

Four Corners – Bozeman Corridor

Two other commuter routes between communities have emerged as high priorities within the countywide trail system. The first links Four Corners (Monforton School Road) to Bozeman (Map 7). The safest way to connect these two places would be via a paved boulevard trail, separated from the Huffine Lane road and shoulder. The road right-of-way appears to be wide enough to accommodate such a trail. The eastern portion of the trail could follow the old Farmer's Canal that would separate the trail from the edge of Huffine Lane.

A less-desirable but cheaper (in the short term) alternative would be to create a six-foot wide bicycle lane on the shoulder of Huffine Lane, separated from auto traffic by a rumble strip. Minimum maintenance requirements for this lane would be street sweeping and snowplowing at least once a week.

Four Corners – Gallatin Gateway Corridor

The final high-priority commuter route links Four Corners with Gallatin Gateway. This is an area where there is a great deal of fast-moving auto traffic, few to no traffic lights, and local traffic including children on bicycles. It is also developing rapidly, and the demand for safe transportation routes will increase in the next few years. The safest, most feasible way to link Gallatin Gateway to Four Corners would be via a paved boulevard trail on the east side of the road right-of-way along Highway 191, from the new Gateway Underpass to the Four Corners intersection (Map 8).

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Three Forks – Trident Corridor

A recreational route linking Three Forks and Trident that has been proposed by the community of Three Forks, Holnam Cement and others should be given a high priority. This trail would be sited entirely on public land, and would utilize old railroad right-of-way, current highway and county road right-of-way, and a state highway bridge (Map 9).

The trail would originate at the ponds in Three Forks and follow the abandoned railroad right-of-way to the Madison River. There are three alternatives to crossing the river at this point. The preferred route would be to have a bridge cantilevered off the existing active railroad bridge. This would provide the most direct route. A second alternative would be to find an existing 220-foot bridge in the Montana Department of Transportation Adopt-a-Bridge supply program that would be appropriate for this application. The third option, least appealing but ultimately the most viable, is to extend the trail north along the levee to the frontage road, then hang a walkway from the the existing frontage road bridge. Another bridge would then be required to cross the flood basin that lies between the frontage road and the railroad bed. The trail would then take the abandoned railroad bed to Trident Road. An additional 50-foot bridge would be required to cross the Middle Fork of the Madison River. The trail would then cross the Frontage Road and proceed along the western right-of-way of Trident Road to connect to the existing trails in the Missouri Headwaters Park. The total length of this trail is approximately 3.7 miles.

There would be a significant cost difference if the trail were built to AASHTO guidelines or to the Class II Trail standards as outlined in this report. A trail built to AASHTO guidelines is estimated to cost \$815,000, while a Class II trail would cost about \$256,000. These two cost estimates are based upon the third bridge option listed above. The major cost difference in the other two options would be the bridge construction costs over the Madison River. If TEA-21 funds were available the local matching funds requirement would only be about \$109,000. If it were decided to build this trail prior to the Lewis and Clark bicentennial then TEA-21 funds could not be provided in time.

This trail, which would be ideal for a leisurely bike ride or walk, could serve as a tourist attraction for Three Forks, persuading visitors to park their cars and spend an afternoon in slower-paced exploration. The trail could improve economic development and might be eligible for sources of funding devoted to that purpose (see Appendix M).

Other Possible Corridors

The committee recommends extension of a recreational trail from Bozeman south to Gallatin Gateway. Proposed routes could follow portions of the abandoned Gallagator railroad right-of-way, the Farmers Canal, or perhaps stream drainages like the lower reaches of Hyalite Creek.

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General Development Guidelines

Maps 1 and 2 show many additional proposed trail routes. Many are based on current “best guesses” about future development in Gallatin Valley. Most of these trails were proposed on the principal that **those who regulate development in Gallatin County should incorporate non-motorized commuter corridors whenever open lands are first developed.** Bicycling and walking are legitimate forms of transportation, and are so recognized in the current Bozeman-Area Transportation Plan and the Bozeman 2020 Plan. Providing opportunities for Gallatin County residents to do them safely and conveniently will reduce traffic congestion, slow the degradation of air quality, contribute to neighborhood well-being and enhance public health. Building trails after land has already been subdivided and developed is very difficult and expensive. Many proposed trail routes are located along major roadways that are slated for improvement or expansion.

A general principal that should guide future trail development in the county is to provide for trails linking schools, parks, shopping centers, businesses, and other community amenities with residential neighborhoods. These are the local, neighborhood counterparts to longer-distance commuter trails. Their purposes are precisely the same as for longer trails, with special emphasis on providing safe ways for children to navigate through their neighborhoods. Few trails of this type are shown in the proposal. This is because the precise layout of future neighborhoods is not known, and few existing county parks are currently mapped. **The Trails Committee strongly recommends that planners and approvers of future subdivisions include these concepts in the design of new residential areas.**

Another important general principal for all trail planning concerns timeliness of opportunity. Some trails have been prioritized by the Trails Committee, however, any trail that conforms to the Connecting Community Plan that would utilize a corridor that comes under development should be elevated to “high priority”. A specific trail location is most easily negotiated before development plans are finalized. Options may be permanently lost after approval. The Connecting Communities Plan provides a general design for trail locations – current development will dictate trail construction priority and specific trail locations.

Non-motorized transportation corridors should be a requirement and be considered a necessary part of the infrastructure of all development proposals. Non-motorized transportation should be considered on an equal footing with motorized transportation.

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CHAPTER 8. Trail Development and Siting Guidelines

New pedestrian and bicycle trails being considered for development in Gallatin County can provide multi-use transportation routes, recreation and public access corridors between fragmented habitats, buffers for unique natural features, and/or venues for education about natural or human history. A number of factors should be addressed when considering whether to develop a particular trail, or in deciding between one trail corridor and an alternative. It is important to examine all the attributes of a proposed trail route and to identify potential advantages and/or disadvantages.

Trail Siting Guidelines

Twenty-five trail evaluation criteria describing a proposed trails' potential benefits, uses, and concerns are listed and defined below. All are based on the importance of trails being publicly accessible. The criteria are grouped under four headings: Human/Cultural Benefits, Ecological Benefits, Economic Benefits and Possible Concerns. These trail criteria are meant to help trail developers and project reviewers to evaluate the pros and cons of a particular trail project and select the most appropriate route. The Trails Advisory Committee strongly recommends that a formal process like that outlined herein, if not these particular guidelines, be used to plan specific trails.

Evaluation Form Use

Each proposed trail segment presents different challenges, opportunities, and benefits. Flexibility has been designed into the selection process to help those concerned evaluate the quality of a particular trail project and select the best trail route. A sample trail evaluation form is provided in Appendix K. This form allows applicants and reviewers an opportunity to score a proposed trail project using a numeric scheme based on the 25 trail criteria. Each of the criteria are indicated as having High, Low or no impact and then is weighted within the group. A higher weighting factor indicates more importance for the criterion. The impact value is multiplied by the weight and recorded as the evaluation score for the criterion. All scores are totaled to provide a siting score for the trail.

Human/Cultural Benefits

Enhances Non-Motorized Transportation – Non-motorized transportation trails provide commuter connections between neighborhoods and community amenities for bicyclists and pedestrians, separate from those routes used by automobiles. Examples of primary links could be connections between residential areas and commercial centers or safe trail routes to schools and parks.

Supports Non-Motorized Recreation – A variety of recreational uses are supported by trails in Gallatin County including hiking, running, horseback riding, bicycling, and cross country skiing. Not all types of use can be accommodated on all trails. Higher priority is given to trails that support a

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variety of uses. Additional recreational uses include fishing and boating access, rock climbing access, wildlife viewing, and fitness courses.

Interfaces with Transportation Plans and Networks – Good projects interconnect, link, complete, or extend existing community trail systems such as bikeway or walkway networks. The primary focus incorporates and connects existing trails or corridors into a planned system of community trails and to other modes of transportation like mass transit and car pool hubs. The location of new trails should take into account transportation master plans that currently exist within city and county jurisdictions.

Provides Connections to Community Amenities – Important goals for planning new trails are to provide convenient pedestrian travel routes to community amenities such as schools, parks and commercial areas. Urban trails serve as alternative paths for normal daily movement within the community and between neighboring communities. This ranking scheme gives priority to the most direct route that:

- links or completes a system,
- serves as an essential core routes upon which a bike/pedestrian system will depend,
- extends an existing bikeway or walkway, or
- initiates a key part of the planned system.

An isolated project with no linkage to a trail network earns a lower ranking.

Improves Safety – Well-designed trails significantly improve pedestrian safety by separating automobiles and trail users. A high priority is to provide safe multi-use trails so that families, children, and the elderly can reach schools, parks, and community amenities. All man-made and natural hazards should be considered in the planning and construction of new trails. Every effort should be employed to produce safe, hazard-free paths and trails that prevent conflicts or accidents between trail users and motor vehicles.

Supports Educational Uses – Educational uses center on the opportunity to view, study, and interact with the flora and fauna of the area the trail transits, or to learn about local history and culture. Examples of educational uses provided by trails are bird watching and wildlife viewing, historical information and research, science (water analyses, ecology, *etc.*), as well as plant and flower. Trails that are located in close proximity to schools and allow easy access for children and teachers would have a higher ranking.

Provides Handicap Access – A multi-use trail design should be accessible: free of barriers and obstructions making the trail usable by people with disabilities. The more accessible a trail, the more users can enjoy it. An accessible trail must meet a number of specifications concerned with width, passing space, surface, slopes, clearance, rest areas, and signs. Accessible trail support

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facilities like parking spaces, rest rooms, drinking fountains, and picnic tables are also design and planning considerations.

Makes Use of Existing Corridors – Existing corridors, such as road rights-of-way, irrigation ditches, abandoned rail-beds and utility rights-of-way, can provide continuous trail alignments without crossing private land. Streams, rivers, draws, and ridges often serve as natural travel routes for people and wildlife. Pre-planned trail alignments within new subdivisions offer important trail corridors through developing areas. Informal social trails develop because of human use and may require formal development to serve a growing community need.

Public Support/Demand – Trails with high potential for usage should be given higher priority relative to trail projects of a similar nature, with less anticipated use. When residents of an area or community perceive a new trail as a positive asset, then approval and funding sources are much easier to obtain. Support and demand should always be important considerations in project selection.

Seizes Available Opportunity – Construction of a particular section of trail may be time-constrained because of readily available construction funds, a gift or donation of limited duration, available grant opportunities, changes in land ownership, or new development plans. Trail projects should be prioritized to take advantage of such opportunities, so that the trail network can continue to expand efficiently. An example would be the early development and planning of a trail through a parcel of land slated for development, rather than negotiating trail easements with individual landowners after the land has been developed.

Ecological Benefits

Protects Natural/Landscape/Environmental Features – Protection and maintenance of existing natural, landscape, and environmental features (including, but not limited to wetlands, stream corridors, native vegetation view-sheds, and undisturbed habitat) is an important consideration in selection of a trail right-of-way. A trail right-of-way can act as a linear buffer to ensure that other land uses do not encroach on a unique natural feature.

Connects Fragmented Natural Lands – A trail greenway corridor can serve to connect and preserve fragments of undeveloped open space and important plant communities like wetlands, stream corridors, tracts of native vegetation, and undeveloped view-sheds. This type of linear park can preserve wildlife travel routes and provide important public access for humans. Linear trails in urban areas can help relieve the stress of living in high-density communities by offering access to undeveloped open spaces.

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Provides Critical Buffering Function - A trail right-of-way corridor, when placed adjacent to a natural feature (including, but not limited to wetlands, stream corridors, native vegetation, and undisturbed habitat) can provide a buffer for the natural feature and result in its protection. For example, a trail along a stream corridor buffers the stream from lawn chemicals and contaminated runoff from paved surfaces. The buffer can also preserve native vegetation that is often cleared with development to provide a manicured look.

Diminishes Air/Water Pollution – When a trail allows movement from one point to another without the use of internal combustion engines, it helps diminish air pollution. Trails can also act as stream-side habitat buffers by preserving an intact vegetated corridor along the waterway. This buffer slows water run-off and helps maintain water quality, cuts down soil erosion, slows run-off, and ultimately minimizes damage to man-made structures during floods.

Economic Considerations and Benefits

Easily Secured Easements/Rights-of-way – Easily obtained easements and rights-of-way for trails make them more economical to construct. Siting should always take land acquisition and construction costs into consideration.

Construction Funds Exist – Trail construction must be financed. A well-planned project with strong community support is more likely to garner grant monies and private donations. Securing construction funds early in the planning and development process is a plus for any trail project.

Easily Maintained – A successful maintenance program requires continuity and a high level of citizen involvement. Regular, routine maintenance on a year-to-year basis not only ensures trail safety (and reduces legal liability), but also prolongs the life of the trail. Trail maintenance is ultimately an economic issue based on location and the nature of the trail. Comprehensive planning minimizes safety and maintenance problems later. A budget and management plan should be developed before construction begins. Weed control is a fundamental management consideration of all trail segments.

Maintenance Mechanism Exists – Maintenance of new trails is best accomplished by existing organizations like an adopt-a-trail group, a local municipality, or a managing agency. Higher priority is granted to trail plans that have a developed, long-term maintenance plan.

Provides Best-Cost Alternative – Frequently, a proposed trail might have more than one possible route or alignment. The selected route should provide the best-cost alternative for the trail in comparison to projects of a similar nature. Cost should not be an overriding factor, however. All siting criteria must collectively be taken into consideration so that total costs and benefits can be weighed. Some projects might appear very expensive for the length

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constructed, but can provide a missing link in a longer corridor, bridge an obstacle, or remove a deterrent to walking or bicycling.

Stimulates Economic Development – Numerous urban and rural trails throughout America (including in Gallatin County) are recreation destinations. A trail that draws visitors out of their automobiles for a bike ride, picnic, or walk down Main Street, also provides an economic opportunity for the community. Heavily used trails can provide customers and boost the business of bike shops, sporting good stores, hotels, restaurants, *etc.* Property values of land along a trail corridor often increase as the trail becomes more popular, further stimulating economic growth.

Available Trailhead Parking and Ease of Access – One goal of the trail network is to curtail the use of automobiles, however, ease of public access, and adequate parking at convenient locations is of utmost importance. Sample questions that should be addressed include: Does the public have convenient and safe public access to the trail corridor? Is adequate parking needed and available for access? Will it meet increased demand?

Possible Concerns

Safety Concerns/Constraints – The proposed siting of a trail may raise safety concerns. Constraints on trail siting include road crossings, proximity to roadway edges and water-bodies, natural or man-made hazards. All locations where the trail user might encounter personal danger along a trail corridor should be carefully evaluated and the risk reduced or eliminated by good design.

Local Opposition – Proposed trail siting must deal with questions such as:

- Will there be local opposition to the trail?
- What are the anticipated conflicts with neighboring landowners and can they be mitigated with a different alignment, educational signing, landscaping, fencing, *etc.*?
- Are mechanisms for bargaining with the trail opponents available? Examples include tax relief, open space designation, easements, land trades, *etc.*

Impact on Natural/Landscape Features – Trails are frequently sited to provide access to natural habitats, or unique landscape features. Evaluation of a proposed trail must take into account its possible negative impacts, such as wildlife disturbance, the potential for spreading noxious weeds, and the destruction or disturbance of native plant communities. Preservation of the feature should have a higher priority than easy or direct access to it.

Construction Hindrances – Most trail siting is initially done on the two-dimensional surface of a map. The real three-dimensional world may well place

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hindrances to the construction of a trail in the form of environmental impact or physical construction difficulties. Examples include wetlands or boggy soils, stream crossings, extreme topography, existing infrastructure, and insufficient access for construction equipment. If the hindrances are too great, the trail may have to be re-sited.

Using Existing Information in Planning

Planning of future trails is a complex task. This task is made easier through the use of geographic information that the City of Bozeman and Gallatin County maintain on their computers. The collection of information about existing, planned, and proposed trails and trail corridors was designed for compatibility with existing City and County computer software. Two programs are used to compile, manipulate and display the information. ArcView GIS is a desktop Geographic Information System which supports the display of spatial and tabular data as maps, tables, and charts. ArcInfo is a companion program used for handling, managing, and analyzing the information used by ArcView.

These GIS programs support the process of “data layering”. Sets of diverse information, stored as databases, can be viewed visually and comparatively over an easily read Gallatin County base map. The base map layer, with roads, contour lines, or even aerial photographs, is displayed on the computer screen. Additional detail layers are then added to the screen image allowing multiple layers to be examined and analyzed. Greater detail can be observed by “zooming in” on a desired point. Through this technology, proposed trails can be contrasted with existing roads, watercourses and trails to determine a best location. The information for a record in the databases can even be viewed by “clicking” on a displayed point or feature (road, park, section, structure, soil type, or geologic formation).

The information contained in the databases can be easily updated as new data becomes available. This process enables planners and others responsible for trail planning to have current information at hand for analysis and rating of trail projects.

During the process of planning and approving new trails, decisions concerning project priority and feasibility can draw upon available information in many ways. The power of GIS programs allows the visual manipulation of information for comparison between alternatives. The following examples illustrate some of the analytical activities that can be performed with the existing GIS programs:

- Designate corridor boundaries, existing trails, or the beginning/ending subdivisions or plats.
- Highlight all subdivisions, public/private land, plats, *etc.* with existing trails.
- Show all publicly/privately owned trails, parks, open space, common space.
- Show all trails/parks with private/public maintenance.
- Show all trails/parks with rest rooms, drinking water, fitness areas, *etc.*
- Show all trails that begin at, end at, or border schools/shopping/parks/other recreation/businesses.

These analytical tasks are dependent upon the information present in the databases available for use by the GIS programs. The City and County are currently assessing, converting, and

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adding data to provide for the highest level of accuracy and compatibility possible.

The power of the GIS programs lies in their ability to make rapid changes in the type and scope of information being compared. A paper map is static. A GIS program, employing progressive detailed visual comparisons of diverse records, can allow decision-makers to “jump” back and forth between views. The validity of assumptions made about each project, as well as the incorporation of criteria proposed by the Trails Committee, can be readily documented and thus support decisions made. The process of funding awards or project approval can be more accountable.

Weed Management

The installation of new trails increases the potential for the introduction of noxious weeds. To combat this threat, a Weed Management Plan should be developed and implemented in conjunction with the construction project and in cooperation with the Gallatin County Weed Control District. The plan should include the following goals:

- Prevent the introduction, reproduction and spread of designated noxious weeds in the immediate vicinity of the trail.
- Identify and contain new invasive weed species.
- Reduce the extent and density of established noxious weeds to a point that natural resource damage is within acceptable limits, and wherever possible eradicate existing stands of weeds.
- Implement the most economical and effective weed control methods for target weed species while limiting damage to native plant communities.
- Implement an integrated management system using all appropriate available methods or a combination of methods.
- Integrate public and private landowners in the management and control of noxious weeds.

The gravel construction materials used in trails should come from weed-free pits with active and effective weed management plans on file with the Gallatin County Weed Control District

Resource Impacts

It is unlikely that a trail construction project will not have some impact on the environment. It is very important in planning a project that environmental impacts be considered and that potential impacts are minimized. It would be advisable for all project sponsors to have a wildlife biologist or natural resource specialist review the proposed project and visit the site to determine what critical resources a project might affect. A well-planned and executed project will provide greatest public benefit and result in minimal environmental impact.

Waterway Considerations

The maps included in the Connecting Communities Plan show many proposed future trail routes that follow stream corridors. There are several reasons for this. Because of their shallow groundwater, these areas (“riparian areas”) are often unsuitable for residential or commercial development. They are very pleasant places to be afoot or on a bicycle. And, in

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some cases dedication as parkland or trails spares them from more-intensive development. However, these corridors concentrate wildlife, and so are very sensitive to the presence of people.

Waterways and buffers lay out a natural framework for the community asset of trails. A trail system is quite compatible with streamside buffers. Trails provide access to "wild refuges" in urban areas as well as providing alternatives to driving. Poorly sited or random trails may have negative impacts to water courses and should be actively designed to maintain vegetative buffers between trails and stream banks, to avoid channeling silt into stream, to size bridge crossings to avoid hydrologic constrictions resulting in erosion, and to avoid encouraging entry into critical habitats. Making healthy streamside corridors available to the public encourages an appreciation and awareness of our communities' natural resources and fulfills a need for wildness we all have. The "relocation" of streams is a detrimental practice. Creative alignment of all transportation routes to avoid such impacts of streams should be required. Appendix J contains specific comments and recommendations concerning the appropriateness of trails in riparian zones or corridors.

Stream and Wetlands Permitting

Whenever a project impacts surface water or wetlands a permit or permits may be necessary. Early in the trail development process, it is wise to contact the jurisdictional authority (City or County Planning Departments) and natural resource, wetland, or hydrological specialist to determine what permits may be necessary. Examples of the most commonly required are the 310 permit (Montana Natural Streambed and Land Preservation Act), 124 (Montana Stream Protection Act), or 404 (Federal Clean Water Act). Bridge crossings or the deposition of fill material in a wetland will likely impact surface water resources and require permits. Flood plain permits are also required within County jurisdictions, prior to construction of bridges or other structures within the floodplains of active streams.

Several general rules of thumb may be helpful to an inexperienced trail builder when it comes to acquiring stream and wetland permits:

- The first tip is to be patient and budget plenty of time to get through the permitting processes. Find the experts help solve particular sets of problems.
- Ask lots of questions but do not unduly burden the permitting agencies.
- Be thoughtful in the trail design and layout process to avoid sensitive wetland areas if at all possible.
- Leave an adequate vegetative buffer between stream banks and wetlands to prevent sedimentation and erosion problems. The size, volume, and sinuosity of the active stream channel will help determine reasonable setbacks.
- Avoid any unnecessary impact to stream channels by building free spanning bridges that completely clear the banks and don't restrict stream flow.
- Make sure the bridge is placed well above anticipated high water flows and is designed to survive a catastrophic flood event (see the ADA Specifications for Pedestrian Bridges in Appendix L).
- Keep construction equipment out of the stream channel and limit disturbance to bank vegetation.

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- Rehabilitate all disturbed areas resulting from trail construction and control weed infestations.
- Above all, remember that streams and wetlands are irreplaceable public resources that deserve the utmost respect.

Information Resources

A very good reference is *A Guide To Stream Permitting In Montana* which can be obtained free of charge from the Department of Agriculture's Natural Resources Conservation Service Field Office in Bozeman or the County Extension office. Two Montana State Programs can provide helpful information free of charge about possible species of interest or cultural resources found in the vicinity of a proposed project. The Montana Natural Resource Information System provides location maps for fish, wildlife, and plant species of critical interest (<http://nris.state.mt.us/mtnhp/index.html>). The State Historical Preservation Office in Helena will conduct a search of their Cultural Resource Information System to determine if any historically important structures or sites have been documented in the area of the trail project (<http://www.his.state.mt.us>).

The federally funded Recreational Trails Program, which is administered by the Montana Department of Fish Wildlife and Parks Department, has requirements to guard against negative impacts to fish and wildlife resources associated with the Program. Any trail projects submitted to the State of Montana's Recreational Trails Grants Program that have any potential to affect the environment (through run-off, sedimentation to streams, dust, displacing wildlife *etc.*) are required to submit a Montana Environmental Policy Act Environmental Assessment checklist. Qualified fisheries and wildlife biologists are also required to complete Wildlife and Fisheries Review forms as a necessary part of the application process. Based on the level of significance of impacts outlined in the project proposal further analysis may be required. It could take the form of a complete Environmental Assessment or an Environmental Impact Statement. Applicants are also required to determine whether any potential 'listed' endangered or threatened fish, wildlife, or plant species would be adversely affected by the proposed trail project. A project that may affect any of these species may require the preparation of a Biological Assessment.

Safety

The trail itself and all structures built along the trail corridors should be engineered and designed with the safety of the user in mind. Design standards for each trail should vary to meet the needs of that particular trail segment's type of customer or user, and to meet the anticipated levels of use. The trail should also be designed to minimize user conflicts and to direct use patterns. It is advisable to consult a civil or structural engineer for assistance while planning important structures like bridges or raised walkways. Building permits may be required prior to construction in some municipalities, and careful attention during the design phase will insure that the structural integrity and safety of the project are met.

Safety of the trail user is central to all maintenance operations. Responsibility for on-going maintenance of each newly constructed trail segment should be assigned and assumed prior

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to dedication. Maintenance responsibilities for consideration include scheduling and documentation of inspections. Inspections play an integral role in trail safety and should be conducted on a regular schedule with the frequency dependent on the amount of trail use, location, age, and type of construction. Examples include the condition of railings, bridges, and trail surfaces, removal of debris, tree and shrub pruning, weed control, trail drainage, mowing, and trail signage. Trail signage is a very important way to educate and guide the user on how to travel over the trails safely and should be considered early in the trail design process. Maintenance guidelines are found in the appendices and will provide direction for trail safety inspections.

Trail Standards

New trails in Gallatin County should adhere to a consistent set of standards and specifications. Communities and other organizations within the county have developed standards for trail development and maintenance. The Trails Committee collected information that documents these standards. Appendix L presents a compilation gathered from various resources. The material in Appendix L includes:

- Definitions: terminology defined,
- Trail Use Classification and Characteristics: definition and characteristics of the three classes of trails,
- Trail Design Standards: specifications for trail construction,
- Trail Design Guidelines: specifications for trail planning,
- Trail Maintenance Standards: schedules and specifications for trail maintenance,
- Specifications for Pedestrian Bridges: specifications for ADA compliant bridges,
- Trail Construction Handout: abbreviated specifications for on-site construction.

In addition to the material listed in Appendix L, all Class I Trails and some Class II trails (as defined in Appendix L) that have mixed use (bicycle and pedestrian) should also be in conformity with the following two AASHTO Guidelines: I-GBF-3, Guide for the Development of Bicycle Facilities and I-GSDPB, Guide Specifications for Design of Pedestrian Bridges. These publications are available from: AASHTO, P.O. Box 96716, Washington, DC 20090-6716.

These compiled standards, guidelines, and specifications will help ensure that the Gallatin County trail system is constructed and maintained to provide consistent sustainable travel surfaces, user safety and enjoyment with a minimum impact on the environment. **The Trails Committee strongly recommends that these compiled standards, guidelines, and specifications be adopted as requirements.**

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CHAPTER 9. Sources of Support for Trail Projects

There are many possible sources of support for public trail projects, and a number of them have been tapped for projects within Gallatin County. Appendix M is a compilation of information on ten programs or general sources that could support projects in the county. The most prominent programs are described briefly below. Others can be located by searching on “trails” in the database: <http://www.sonoran.org/cat/default.asp>.

The **Community Transportation Enhancement Program (CTEP)** is now included under the more encompassing **TEA-21** program. **CTEP** is a Federal program administered by the Montana Department of Transportation. Each Montana county, and all incorporated cities, are eligible for cash grants for eleven types of transportation-related activities. These include planning, design and construction, surveying, and land acquisition for bicycle and pedestrian facilities. At present, Gallatin County receives roughly \$130,000 a year under this program, and the City of Bozeman receives an equal amount. The funds from multiple project years can be combined to support particularly expensive projects. Additional information concerning TEA-21 funding can be obtained at <http://www.fhwa.dot/gov/tea21>.

Federal funds are disbursed to the states under the authority of the **National Recreational Trails Act** (NRTA); in Montana, they are then divided among projects statewide based on a competitive grant-application process. Montana currently grants about \$600,000 each year to specific trail projects. Sponsors can request up to \$35,000 per project. The environmental review process for these grants is very rigorous, and project proponents may need to conduct preliminary work for up to a year before becoming eligible to apply for a grant. In Gallatin County, projects ranging from bridge building to snowmobile trail grooming have been supported by these grants.

The Park Service of the US Department of the Interior runs the **Rivers and Trails Conservation Assistance Program**. This program does not give cash grants. Instead, it offers expert assistance to project sponsors in the early stages of project development, for planning, fund-raising, gathering community support, *etc.* The West Yellowstone Trails Association has used these services to plan the loop pedestrian trail around West Yellowstone.

The Federal **Land and Water Conservation Fund** gives cash grants for wildlife, park and trail projects, and can be used to fund up to 50% of outdoor recreation project costs. The LWCF program is administered in Montana by the Montana Department of Fish, Wildlife and Parks, which sets a limit of \$50,000 per project. Grant applicants must be political subdivisions of the State of Montana. In recent years, the City of Bozeman has received funding for a number of projects from this program. In 2000, a grant was received for land acquisition to serve as open space, at the boundary between city and county property in the Sundance Springs area.

An economic-development program administered by the Forest Service can be tapped to support trails projects. The **Rural Community Assistance Program** that is administered by the Forest Service has given cash grants to Montana communities for parks and for trail

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development. Projects proposed for this funding must have economic development as their primary focus. The projects must follow on a broad-scope community planning process. Grants are limited to communities heavily dependent on natural resources, or having a major Forest Service presence. Several have been given to Montana communities in recent years.

Many private funding sources have helped generously with trail projects in Montana. Corporations and businesses located or doing business in the area of particular trail projects have contributed cash, materials, supplies, and labor. Medical facilities, retirement complexes, and public and private schools are primary community facilities whose residents and employees can benefit from convenient trail access. These institutions may use trails in their programs, and can also be important sources of financial and material support.

Private individuals, families, neighborhood associations, conservation groups, and service organizations often donate cash, labor, equipment, and materials for sections of trail in their communities. Special interest groups that enjoy the opportunities provided by public trails may step forward to help. These may include the local running or mountain biking clubs, bird watching organizations like Audubon, the Native Plant Society, equestrians, disk-golf players, cross-country ski clubs, kennel clubs, and wildlife organizations. Another very important contribution to any trail project is the donation or below cost sale of lands or trail easements along proposed trail routes. These can often make or break a trail project and are extremely valuable contributions.

In Gallatin County, the **Gallatin Valley Land Trust** is the primary developer of new public trails on non-Federal lands. Other organizations active in this area are the **Bozeman Rotary Clubs** (morning and noon), and the **Breakfast Optimist Club**. At Big Sky, the new **Big Sky Trails Committee** serves that role. Because they are not affiliated with government, organizations like these have added credibility with many landowners. They are assisted by the non-profit **Montana Conservation Corps**, a key provider of work crews and crew leaders for volunteer projects.

Creating partnerships with all the contributors mentioned previously might be the most important element in a successful trail system. These partnerships allow different groups to work together toward shared goals for their community. Unifying these partners leads to a well-organized trail building effort that has the potential to truly connect the communities of Gallatin County.

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CHAPTER 10. Administrative Recommendations for Trails Planning and Development

To provide safe, convenient non-motorized transportation infrastructure, the trail network in Gallatin County must integrate new trails that are different than those developed in the past. These trails will be long, multi-jurisdictional, in and adjacent to communities rather than in the backcountry, and often parallel to existing roads. They will be expensive to develop. This network cannot be brought about in any reasonable time using the resources that have developed short sections of recreational trail in the past. The Connecting Communities Plan concludes with an evaluation of alternatives and recommendations regarding “who should do what” to create this trail network.

As a draft document, the Connecting Communities Plan serves as guidance, no more. Trail planning and development are currently conducted primarily by private organizations, with very little coordination. Without adoption into the County Growth Policy, the Connecting Communities Plan has no legal standing, and cannot be invoked to require provision of easements or development of trails when land in the county is developed. Most of the highest-priority trails in the Connecting Communities Plan will be expensive and difficult to develop. Without a public agency acting on its own mandate, and enhanced coordination among the interested parties, this development is unlikely to take place. A prime example is the Bozeman-Belgrade commuter trail proposed more than 10 years ago by the Bozeman POST Committee. It has never been developed, because it is in no one’s job description.

Trail Development Alternatives

- 1) Minimum impact alternative: The Connecting Communities Plan is adopted into the County Growth Policy and used by the Planning Department during subdivision review, to require trail easements or public trail development. A checklist item for trails is added to the Planning Department review process. The Connecting Communities Plan is also adopted by the incorporated communities in the county, and used by their planning personnel in the same way.

Advantages: No new administrative structures or positions are called for at any level of government. County and city/town planners are working from the same trails plan – some trails may eventually connect.

Disadvantages: The longer, high-priority trails are not likely to be developed, because they are costly and cross-jurisdictional boundaries. The actual construction and maintenance of proposed trails may not occur since there are no enforcement measures or associated parks district maintenance requirements.

- 2) Open Space Board alternative: The Connecting Communities Plan is formally adopted into the County Growth Policy. The charter of the Open Space Board is altered so that the board or a subcommittee thereof has an explicit charge to coordinate trail planning and development in the unincorporated areas of the county. The charge could include hosting regular coordination meetings among all the organizations involved, developing integrated trail-funding requests for county TEA-

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21 grants each year, and other activities. The Board could maintain a simple, easily accessible database on the Gallatin County website. All current, planned, and proposed trails projects would be posted. Updates would be made as new projects evolve.

Advantages: There would be no need for any governmental entity to add staff; no further change to county growth policy or other statutes would be required; better coordination among trail organizations could be anticipated; there would be the possibility of consummating major projects.

Disadvantages: The Open Space Board may need an additional staff member, and may resist added duties as a dilution of effort. There is a continued reliance on private organizations to hold easements.

- 3) A County Parks and Trails Board: This volunteer board would be appointed by the Planning Board, or possibly by the County Commission. It would be charged with several tasks, including advisory subdivision review, checking for trail connections to parks and schools, reviewing park funding applications and making recommendations, and organizing the county's TEA-21 trail grant application process. Its most important task would be taking the lead in development of the longer-distance "high-priority" trails identified herein. This would be an ongoing advisory board.

Advantages: The work would be handled by a group of people interested in parks and trails; at least initially it would not be an additional burden on the Planning Department. There would be explicit planning for the more costly trails.

Disadvantages: Added support staff may be needed to help the Board. The people would be all volunteers and may not be able to put in the amount of work needed to do a thorough job. There would be continued reliance on private organizations to hold easements.

- 4) County Parks and Trails Coordinator: Within Gallatin County, a position is created for a professional parks and trails coordinator, equivalent to the Open Space Executive Director position. This position could be funded by creation of a countywide Parks District. The duties of this position could be combined with those of the Executive Director of the Open Lands Board. In this alternative, nearly all of the plan review, trail planning, funding and trail maintenance functions would reside with County staff. The possibility of combining funding for this position should be considered. For example, the Noxious Weed Trust Fund could provide money for part-time staff to accomplish weed control along trails.

Advantages: A paid professional with an explicit mandate to implement the trails plan is most likely to succeed.

Disadvantages: The residents of the county would have to approve a slight increase in property taxes to support the District.

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Trail Maintenance Alternatives

Long-term maintenance of public trails requires heavy equipment, knowledge of noxious weeds, and other resources not necessarily possessed by most enthusiastic volunteers. Maintenance alternatives considered by the committee include:

1. Status quo alternative – Some trails are maintained, others are not, depending on their ownership, popularity, and available funding.
2. County Parks/Trails District – County employees, funded by a Parks District assessment, maintain all public trails outside incorporated areas.
3. Minimal Additional Maintenance – County employees, possibly from the Roads and Bridges Department, check on trails and send letters annually to homeowners associations that are derelict in their maintenance duties.
4. Maintenance Coordinator – The County or a consortium of organizations engages a part time maintenance coordinator who organizes Adopt-A-Trail groups, watchdogs homeowners' associations and provides technical assistance to all organizations with trail maintenance responsibility.

Recommendations

The Gallatin County Trails Advisory Committee urges the County Commission to adopt this plan into the County Growth Policy. It can form the legal foundation for review of all new development proposals that may affect trails, parks or open space. Moreover, its identified trail priorities can be consulted whenever County parks or TEA-21 funding decisions are being contemplated.

For the near term, it is recommended that the Gallatin County Commission or the Planning Board take the following actions:

1. Begin a deliberate exploration of the possibility of forming a County Parks and Trails District. The County should take as a model its own formation of the Gallatin County Local Water Quality District. Exploration will involve not only legal research, but also evaluation of support and opposition by County residents and other landowners, plus mission/vision statements, staffing and organizational plans.
2. Appoint an advisory County Parks and Trails Board. Its charges should include:
 - Initiate a process altering County rules to require trail easements as a part of development requirements.
 - Review all subdivision proposals for parks and trail dedications developed in conformity with this plan, so that trails in new subdivisions connect with each other and with community amenities.
 - Initiate and sustain active coordination among the principal entities involved in trail development in Gallatin County. These include the Gallatin Valley Land Trust, the Bozeman Recreation and Parks Board, the Montana Department of Transportation, the Big Sky Trails Committee, and the planning boards of the incorporated communities. The

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coordination should take the form of periodic trail-activity updates communicated via mail and e-mail, and convening a semi-annual county “trail summit.” The objective will be to maximize the effectiveness of all the organizations by coordinating their efforts – particularly in procuring funding – to develop the high-priority trails identified herein.

- Take the lead in forwarding projects to develop these trails. This means preparing proposals, working with the Montana Department of Transportation, and coordinating with other organizations to plan for easements and trail maintenance. **This is the most important task in realizing the Connecting Communities Plan.**
3. Formulate a signage policy for new trails, including standards for sign type and size, locations along trails to be signed, and information to be conveyed.
 4. Engage a contractor to map all the public parks outside incorporated areas in the County. Currently many of their locations are poorly defined, so that it is impossible to plan a trail network with segments connecting the parks.
 5. Through the Planning Department, initiate annual late-winter outreach to homeowners associations, reminding them of their trail and park maintenance obligations, and offering information that will help them fulfill these obligations.
 6. Post the Connecting Communities Trails Report and Plan electronically on the county website, and make the maps and associated trails data files accessible on the county GIS website.
 7. Continue to hold trail easements, as the County has done in the past with the Gallatin Valley Land Trust. Begin legal research to define the costs, benefits and liabilities associated with the County holding trail easements. Improve and streamline the process so that other trail-building non-profits and organizations can effectively negotiate trail easements with private landowners that will ultimately result in the creation of a unified county trail system. Appendix N contains two examples of trail easements.

In the longer term, the Trails Committee is convinced that the County will have to take a much more active role in developing and maintaining parks and trails outside incorporated areas if this proposal is to be realized. At the very least, this will entail appointment of an advisory Board to coordinate trail development throughout the county. It may mean administering a County Parks and Trails District with one or more paid employees and a guiding Board appointed by the Planning Board or the County Commission. It may involve a greater or lesser degree of assistance to landowners with their trail maintenance responsibilities. The development of a well-defined and permanent mechanism for the County to hold trail easements would speed the realization of the Connecting Communities Plan.

The large-scale integrated trail network that is envisioned in this plan cannot be brought about through the work of disparate small volunteer groups and private organizations. A public-sector entity with countywide jurisdiction, review/permitting powers and paid staff will be required. The Trails Committee believes the proposed trail network will make a

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valuable contribution to the quality of life in Gallatin County, and urges the County Commission and the Planning Board to take the steps necessary to bring it about.